Proposal: Maintenance for the [substrate-api-client](#) Jan25 - Jun25

Proponent: `14mY9eUFJT615yWz2G7x4NP53svJVXvTzdpWDsmaXFAN7uYN`
Date: November 2024
Requested DOT: $33'200
Short Description: This proposal covers maintenance of the substrate api client: updates, user support and small improvements for the first half of 2025.

The [substrate-api-client](#) is a Rust library for connecting to a substrate-based node via RPC from a no-std environment, like trusted execution environments or IoT devices. An RPC client is a library, with similar features as [Polkadot-js](#). With an RPC client developers can easily interact with any Polkadot or Kusama chain. There are [RPC clients](#) for different programming languages. For Rust, the most popular RPC client is [subxt](#). The substrate-api-client uses core functionality of subxt and makes it available in a no-std environment.

This proposal is a continuation of our previous maintenance proposals. The previous proposal can be found [here](#). See also our reports in the comments section of each proposal. We aim to seek ongoing funding.

The following ecosystem projects use the substrate-api-client actively:

- [Ajuna Network](#)
- [Encointer](#)
- [Integritee Network](#)
- [Litentry](#)
- [Polkadex](#)

Our current Github statistics (as of November 18th 2024):

- Forks: 124
- Repositories that depend on it: 270
- Watchers: 11
- Star rating: 261

We therefore consider this library a common good for the ecosystem and we are looking for sustainable financing of maintenance to keep up with frequent Substrate/Polkadot releases.

Planned work

Stay up-to-date with the ecosystem

The Polkadot ecosystem is fast moving. Therefore, it is important to keep up-to-date in a timely manner. Our activities include:

- Follow Polkadot releases within a timely manner
- Updates of used libraries as needed
- Replacement of unmaintained libraries

Support existing and new users

The easiest way to make sure that users can make the most out of a library is by providing direct support. Particularly we:

- Answer questions on usage and analyze problems
- Track current issues, document bugs and provide workarounds
- Review and support incoming PRs from the community

Small Improvements

We plan to work on small improvements, such as: [#777](), [#764](), [#730](), [#731](), [#767]()

Team

Supercomputing Systems AG (SCS), based in Zurich, Switzerland

Supercomputing Systems AG is a service provider with 140 engineers, working in the fields of software, electronics and system design. Profound know-how, solid methodological competence as well as efficient project management are the foundation of our success. Within the company we have a team of 5 blockchain developers, who have experience in the Polkadot ecosystem.

Our blockchain team has been a contributor to the ecosystem since 2019 in various projects. In 2023 and 2024 we mostly contributed by maintaining and improving the [substrate-api-client]().

Our team on GitHub:

- [haerdib]()
- [niederb]()
- [echevrier]()
- [masapr]()

Costs

This proposal is offered at **$33'200**.

The following table gives an overview on the expected costs:

	Deliverables	Cost
Stay up-to-date with ecosystem	Updates from Jan-25 until Jun-25	$ 11'100
User Support	Support from Jan-25 until Jun-25	$ 9'300
Small Improvements	Implementation incl. ● code reviews ● documentation ● release notes	$ 12'800
Total Costs		**$33'200**

SCS offers their work at 185 CHF (Swiss Francs) per hour.

Updates and user support will be provided **from January 1st 2025 until June 30th 2025**.

At the end of every second month, SCS will report on the issues they worked on. The report will be provided as a comment on Polkassembly (see our report from September & October 2024 as an example). We will further announce each report in the Polkadot Direction channel on matrix. Apart from that, the progress can be tracked in the GitHub repository.

Beneficiary

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